

# **Code of Good Practices in Research**

## **University of Zaragoza**

*Approved by the Governing Council*  
*(Meeting of 13 November 2018)*

## INDEX

Introduction	5
1. Principles	7
2. General rules on best practice in research	9
3. Organisation, leadership, training and supervision	11
4. Research design	13
5. Conflicts of interest	15
6. Research with humans and human material	16
7. Data collection and retention	18
8. Research involving animals	19
9. Biosecurity	20
10. Health, safety and occupational risks	21
11. Industrial and intellectual property	22
12. Supervision and audit	23
13. Evaluation, peer review and advice	24
14. Publication and authorship	25
15. Malpractice in research	27

## Introduction

The Statutes of the University of Zaragoza (arts. 133, 134, 169 and 170) are responsible for identifying the rights and duties, which as public employees are reserved for both teaching and research staff, as well as those of administration and services. For its part, Law 14/2011 of 1 June 2011 on Science, Technology and Innovation also pays attention to the rights and duties of research personnel and technical staff. The content of the legislation referred to above links and rests to a large extent on the content and requirements arising from a code of good practice in research.

On the other hand, the University of Zaragoza adheres to the National Declaration on Scientific Integrity, signed in November 2015 by the Confederation of Scientific Societies of Spain (COSCE), Crue Spanish Universities and the Higher Council for Scientific Research (CSIC), in which it is expressly mentioned that “It corresponds to each institution or entity subscribing to the Declaration, to develop and implement it, promoting and promoting an ethical awareness in general, and responsible research based on good scientific practices, in particular”.

In application and development of all these normative provisions, the Code of Good Practices in Research (CBPI) of the University of Zaragoza has been designed to promote good practice in this field and help prevent bad practices, offering principles, guidelines of action and standards to follow, applicable both to the university, as a public institution, as well as to its research staff, including those belonging to other entities, temporarily carry out activities in their premises and facilities.

This Code is intended to be a useful and capable instrument to promote and guarantee the integrity and quality of the scientific research carried out at the University of Zaragoza. Its objectives are to:

- Fostering honesty, rigor and responsibility in research.
- The acquisition of good scientific practices at the training stage of the research staff.
- Improvement in the quality of research in all its fields and aspects.

The Code is, therefore, a necessary complement to all the legal regulations of mandatory compliance applicable to ethics in research under whose scope of action the University of Zaragoza carries out its work, as well as the commitments and declarations voluntarily signed by the University of Zaragoza. The Code may, in turn, be developed by regulations specific to some of the aspects included in it.

Finally, it should be noted that, although the text refers to “research personnel”, it must be considered affected by this document, by reason of their functions and competences, both these personnel, as well as those of administration and services that collaborate in the research tasks or in any of the activities included in the document.



The University of Zaragoza assumes this Code with the commitment that it is a valid and effective instrument that contributes to the resolution of problems or university conflicts that may arise in the field of research.

## 1. Principles

1.1 The research staff will strive to achieve the highest possible quality in their research work working with the aim of producing and disseminating results of the best quality. For its part, the University of Zaragoza will develop policies and actions that facilitate this objective.

1.2 The Governing Council of the University of Zaragoza approved on 29 April 2013 the agreement on open access to knowledge, which implies, on the one hand, adhering to the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities of 22 October 2003, included in Annex I to the agreement, and, on the other hand, expressing its agreement with the principles of the Open Access movement and developing an institutional open access policy as set out in Annex II to the agreement.

1.3 By agreement of 22 April 2015, of its Governing Council, the University of Zaragoza acceded to the European Charter of the Researcher and the Code of Conduct for the Recruitment of Investigative Personnel.

1.4 The University of Zaragoza and its research staff must work to create and maintain a research culture that encourages and supports honesty in research. Research staff should be honest with both their own research and that of other researchers and should do their utmost to ensure the accuracy of their data and results by recognising the contributions of the rest of the scientific community.

1.5 All legal and ethical requirements applicable to the field of study in which each researcher works and declare any potential or actual conflict of interest related to their research must be met by collaborating in its resolution.

1.6 The working environment should promote open debate on ideas, research methods, data and results and their discussion, always subject to any confidentiality considerations.

1.7 Research staff should be recognised to society as end-users of public funds made available to them for the development of their research and act accordingly. You must ensure that the investigations undertaken comply with the agreements, terms and conditions included in the project and the applicable regulations, allowing for proper governance, management and transparency.

1.8 The university must provide adequate training to its research staff so that they can carry out their research. In collaboration with them, it must identify and address unmet training needs. The research staff shall ensure that they have the skills, training and resources necessary to carry out the research by using, if necessary, collaboration with specialists in the relevant fields.

1.9 It is necessary to ensure the dignity, rights, safety and well-being of all subjects involved in the investigation, including animals, and avoid unreasonable risk or harm. The competent body or authority shall be informed of any doubts or concerns relating to these matters. The investigation should be initiated and maintained only if the expected benefits justify the risks involved.

1.10 In carrying out research activities, the principle of gender equality shall be respected. Similarly, any discrimination based on sexual, political or religious orientation will be avoided.

1.11 The University of Zaragoza will ensure equal opportunities for its staff with special attention to the research activities of people with special needs.

1.12 One of the most important values established in the social policy of the University of Zaragoza is sensitivity and commitment to the environment, advocating for sustainable development, aligning the research practices developed by its staff with this principle.

1.13 All staff of other institutions and companies that carry out their task, must know and respect this code, without prejudice to compliance with the regulations of your company or institution.

1.14 Similarly, the staff of the University of Zaragoza who carry out work, permanently or temporarily, in other institutions and companies will be subject, in addition to the provisions of this code, to the regulations applicable to the place in which they carry out their tasks.

## 2. General rules on best practice in research

2.1 The University of Zaragoza and its research staff must promote and maintain an environment that encourages and supports the development of research under the applicable ethical standards, in an environment of professionalism, mutual cooperation and open and honest exchange of ideas. A culture that promotes good research practice and detects and penalises inappropriate practices should be encouraged.

2.2 The University of Zaragoza and its research staff must comply with all the legal and ethical requirements applicable to their research. This includes submitting requests for reports for ethical review where appropriate and compliance with the results of that review. It should be ensured that research projects are approved by all relevant bodies.

2.3 The research staff of the University of Zaragoza who carry out research work in other Spanish or foreign research centers must comply with the legal and ethical requirements applicable to the research carried out at the University of Zaragoza and those applicable to the research center.

2.4 Similarly, research personnel outside the University of Zaragoza who carry out research work in its facilities must comply with the legal and ethical requirements applicable to this institution.

2.5 The University of Zaragoza must:

- a) Ensure that good research practices are an integral part of your research policy.
- b) Establish clear policies and procedures that cover the principles of good research practice and provide research staff with information and training on established standards.
- c) Ensure that these policies and procedures complement and align with existing higher-ranking policies and procedures.
- d) Provide training, resources and support to their research staff to ensure that they are knowledgeable of the policies, regulations and procedures related to ethics in research.
- e) Encourage your research staff to consider good research practices as a fundamental part of their work.

2.6 The research staff of the University of Zaragoza must:

- a) Recognise their responsibility to conduct research in accordance with ethical standards.
- b) Conform to the policies and procedures of good practice in the research of the University of Zaragoza seeking support and guidance when necessary.
- c) Collaborate with the University of Zaragoza in the compliance, dissemination, development and updating of the regulations on ethics applicable to research.



### **3. Organisation, leadership, training and supervision**

3.1 The University of Zaragoza must have elements of direction, supervision and management of research and research staff, establishing clear lines of responsibility and providing research staff with the necessary support to comply with the legal and ethical requirements to which their research is subject.

3.2 Research teams must have an organisational structure in which the lines of authority and communication between their members are clearly indicated, as well as the responsibilities for the development of the research activity.

3.3 The research teams must have a manager who will have the leadership and representation of the team, both in the scientific aspect and in the aspects of organisation and management.

3.4 All members of the research team, especially those responsible, have to collaborate in creating a work environment that contributes to the scientific and personal training of all components, as well as to the development of their skills, and to the achievement of the common objectives of the research.

3.5 The University of Zaragoza should promote the professional career of its research staff by providing them with the appropriate training so that they can carry out their research tasks and develop their knowledge and skills throughout their careers, including training in the design, development and dissemination of research. This training should be appropriately updated.

3.6 The University of Zaragoza must guarantee the correct training of research personnel in training through the mentoring and supervision tasks carried out by qualified mentors to help them in their training and the development of their career.

3.7 The research staff involved in the supervision and training of research personnel in training must be aware of their responsibility, dedicating the time and resources necessary to carry out this function, depending on availability and with the support of the University of Zaragoza.

3.8 Those exercising the functions of mentoring research personnel in training, shall facilitate the fulfilment of their obligations with the financing entities of their activity, facilitating access to the necessary means, and avoid their involvement in tasks outside their training.

3.9 Those who carry out the mentoring should transmit to the research staff in training the importance of carrying out their work with a rigorous compliance with the guidelines marked by good scientific practices, paying special attention to issues related to safety and the prevention of occupational risks.

3.10 The training research staff will follow the guidelines of those responsible for their mentoring, keep them informed of the development of their work and their initiatives and carry out the tasks entrusted to them, within the objectives of their training, for the proper functioning of the research team in which they carry out their work.

#### **4. Research design**

4.1 The design of research projects should ensure that the proposed research addresses relevant issues, being designed either to provide new information to existing knowledge on the topic in question or to develop new research methods.

4.2 The design and conduct of the proposed study shall be presented in detail in a research plan that includes, as a minimum, the background and justification of the proposal, the working hypothesis, the specific objectives, the methodology to be used, the work plan and the planned timetable, the available and necessary resources, the participating team and the dissemination plan of the results, as well as the way in which the data will be collected, analysed and managed and, where appropriate, ethical and legal aspects and safety forecasts.

4.3 In the event that the proposed study is to be submitted to a call, the research plan will include compliance with all the requirements set out in it.

4.4 The research team must ensure that its components have all the skills and experience, as well as access to the equipment and resources necessary to carry out the proposed research, using, if necessary, collaboration with specialists in the relevant fields.

4.5 The participation of the staff of the University of Zaragoza in external projects, managed by other institutions or companies, must have the express authorisation of the university manager.

4.6 In the same way, staff outside the University of Zaragoza who participate in projects managed by it or that are developed in its facilities, must have the authorisation of the university, in the terms established in the university regulations, and with that of their own institution or company.

4.7 Unless the responsible person established in the current university regulations provides otherwise, once a research project is completed, the researcher responsible for the team will act as coordinator of the use of the equipment acquired from the project, guaranteeing access to it for both the members of the research team and the rest of the researchers of the University of Zaragoza and its mixed centers.

4.8 In the case of equipment that due to its characteristics require it, the person responsible established in the current university regulations, or the person to which it delegates, will appoint a person responsible.

4.9 For those equipment for which the circumstances advise, a regulation of use will be drawn up that must have the approval of the responsible established in the current university regulations.

4.10 The research staff  
the correct maintenanc



4.11 The methodologies used must come from sources to ensure their reliability. In case the research involves the development of a new methodology, the process of its development and validation will be part of the research protocol and the research staff must have evidence demonstrating its reliability.

4.12 If necessary, agreement should be sought with other teams or entities so that success in research is guaranteed, always under legal formulas and paying the utmost attention to compliance with the agreed terms and conditions for the development of the collaboration, especially in matters related to industrial and intellectual property, the publication and attribution of authorship, which must be addressed as early as possible.

4.13 With the help of the University of Zaragoza, if necessary, the research staff must carry out a risk assessment of the proposed project to determine whether the review of an ethics committee is required, whether there is a possibility of risks to the health, safety and well-being of research personnel and participants, as well as any other requirements applicable to the research.

4.14 Any modification to a project must have the approval of the funding bodies, in accordance with the terms of the call, or of the other parties in the case of research contracts.

4.15 Any modification to a project that has a report from an ethics committee must be brought to its attention for the issuance, if applicable, of a new report.

4.16 In order to carry out the necessary actions to minimise the risks derived, the research staff must inform the University of Zaragoza of the possibility of obtaining results that could be used for illicit purposes.

## **5. Conflicts of interest**

5.1 A conflict of interest is a situation in which a person's private interests, on a personal, professional, financial or other level, interfere or may be understood to interfere with the performance of his or her duties.

5.2 The University of Zaragoza must have a clear and accessible policy to address conflicts of interest, including the necessary guidance to enable research staff to identify and notify them.

5.3 Research staff should be aware of the importance of recognising, revealing and addressing real, apparent or potential conflicts of interest in the preparation, conduct and presentation of their research, as well as when conducting evaluation, peer review and advice.

5.4 When dealing with a conflict of interest, it must be decided whether it is a type and gravity that could compromise the validity or integrity of the investigation, seeking in each case the most appropriate solution to avoid incurring malpractice in the investigation.

## **6. Research with humans and human material**

6.1 The dignity, rights, safety and well-being of those involved should be the primary consideration in any research study. The investigation should be initiated and carried out only if the expected benefits justify the risks involved.

6.2 The University of Zaragoza will make available to its research staff access to an ethics committee trained to solve ethical issues that affect research with both human beings and their samples and issue the relevant reports to carry out the research in accordance with the legal and ethical framework. Its research staff will facilitate the work of this committee by providing all the necessary information and not hiding any information that could be relevant to the committee's action. It will also comply with the agreements and follow the guidelines emanating from the committee.

6.3 The University of Zaragoza and its research staff must ensure that any research with human beings, human material or personal data complies with all legal and ethical requirements, as well as any other applicable guidelines, paying special attention in case the research includes groups considered vulnerable.

6.4 The research staff of the University of Zaragoza that performs or collaborates in research with human beings or their samples developed in other countries, must comply with the legal and ethical requirements applicable at the University of Zaragoza, as well as those of application in the countries where the research is carried out. Similarly, entities based abroad and their research staff participating in research work carried out at the University of Zaragoza must comply with the legal and ethical requirements applicable therein, as well as those of their own country.

6.5 The University of Zaragoza and its research staff must guarantee the confidentiality and security of data related to both the research participants and the human material used.

6.6 Research staff shall not transfer data or samples of human material to other projects or research personnel without the authorisation of the participants or the relevant ethics committee.

6.7 Research papers that include human beings or samples of human material, in addition to the actions of the ethics committee indicated by the University of Zaragoza, will be subject to the regulations and guidelines emanating from any other committee whose action is carried out within the framework of ethics in whose field of action is the University of Zaragoza.

6.8 Research staff conducting human research should ensure that participants have received all the necessary information in an appropriate manner in order to be able to give their consent in full knowledge of the facts, taking special care in the case of working with vulnerable groups.

6.9 If in the course of their work the research personnel detect that the human participants in the investigation are subject to unjustified risk or damage or the human samples are not being treated or stored properly, they must inform the responsible body of the University of Zaragoza, even if the investigations have been informed favorably by the competent body.

6.10 In case a project provides for the participation of students from the University of Zaragoza as subjects of research or study, the responsible research staff must ensure the establishment of adequate procedures to minimise the possibility of undue influences on the obtaining of students' consent and avoid any form of coercion in their recruitment and subsequent participation.

6.11 The incorporation as research subjects of students subject to direct academic evaluation will be avoided, unless the experiment or study to be carried out is part of their training.

6.12 The mere participation of students as taxable persons in an experiment or study may not entail academic benefits.

## 7. Data collection and retention

7.1 The University of Zaragoza and its research staff must comply with all ethical and legal requirements related to the collection, use and storage of data, paying special attention to the personal data with which it has to be rigorous in compliance with the legislation.

7.2 The data that have served as the basis for the publication of the research results, including those considered invalid, as well as the methodology used, must be kept for the legally established period, in a way that allows the verification by a third party of the published results, as well as their discussion with other research staff, respecting the limitations imposed by the legislation and the general principles of confidentiality.

7.3 In cases where there are no specific regulations, the retention period of the data shall be at least 5 years.

7.4 Special attention will be paid to compliance with data retention regulations in certain disciplines, such as health and biomedicine, which may be subject to special regulations.

7.5 The University of Zaragoza owns all the data and information from the projects developed in its facilities under the responsibility of its research staff and must have, when the case so requires, procedures, resources (including physical space) and administrative support to assist research staff in the efficient conservation of data and its storage in a secure and accessible way.

7.6 The research project must include the procedures by which the data will be collected, analysed, managed, made available and finally destroyed.

7.7 The research staff shall collect data accurately, efficiently and in accordance with the design envisaged in the research project, and ensure that it is stored in a secure and accessible form. In cases where this is provided for in the regulations, this procedure must be approved by the competent body.

7.8 Regarding data protection, the University of Zaragoza has its own regulations and the figure of Data Protection Delegate in accordance with the Data Protection Regulation that is mandatory. For more information, you can consult the following website: <http://protecciondatos.unizar.es/>



## **8. Research involving animals**

8.1 The University of Zaragoza has acceded to the Transparency Agreement on the use of animals in scientific experimentation in Spain, promoted by the Confederation of Scientific Societies of Spain (COSCE).

8.2 The University of Zaragoza will make available to its research staff access to an ethics committee trained to resolve ethical issues affecting animal research and issue relevant reports to carry out research in accordance with the legal and ethical framework. Its research staff will facilitate the work of this committee by providing all the necessary information and not hiding any information that could be relevant to the committee's action. It will also comply with the agreements and follow the guidelines issued by the committee.

8.3 Research works that include the use of animals, in addition to the actions of the ethics committee indicated by the University of Zaragoza, will be subject to the regulations and guidelines emanating from any other committee whose action is carried out within the framework of ethics in whose field of action is the University of Zaragoza.

8.4 The research staff of the University of Zaragoza who carry out or collaborate in animal research carried out in other countries must comply with the legal and ethical requirements applicable at the University of Zaragoza, as well as those of application in the countries where the research is carried out. Similarly, entities based abroad and their research staff participating in research work carried out at the University of Zaragoza must comply with the legal and ethical requirements applicable therein, as well as those of their own country.

8.5 If in the course of their work the research staff detect that the animals used in the investigation are subject to unjustified risk or damage, they must inform the responsible body of the University of Zaragoza, even if the investigations have been informed favourably by the competent body.

## 9. Biosecurity

9.1 The University of Zaragoza will make available to its research staff access to an ethics committee trained to solve safety issues affecting research with biological agents and genetically modified organisms and issue the relevant reports to carry out the research in accordance with the legal and ethical framework. Its research staff will facilitate the work of this committee by providing all the necessary information and not hiding any information that could be relevant to the committee's action. It will also comply with the agreements and follow the guidelines issued by the committee.

9.2 Research work that includes the use of biological agents and genetically modified organisms, in addition to the actions of the ethics committee indicated by the University of Zaragoza, will be subject to the regulations and guidelines emanating from any other committee whose action is carried out within the framework of ethics in whose field of action is the University of Zaragoza.

9.3 The research staff of the University of Zaragoza who carry out or collaborate in research with biological agents and genetically modified organisms developed in other countries, must comply with the legal and ethical requirements applicable at the University of Zaragoza, as well as those of application in the countries where the research is carried out. Similarly, entities based abroad and their research staff participating in research work carried out at the University of Zaragoza must comply with the legal and ethical requirements applicable therein, as well as those of their own country.

9.4 If in the course of their work with biological agents or genetically modified organisms the research personnel detect real or potentially dangerous situations, they must inform the responsible body of the University of Zaragoza, even if the investigations have been informed favourably by the competent body.

## **10. Health, safety and occupational risks**

10.1 The University of Zaragoza and its research staff must ensure that all research carried out under their responsibility complies with all the requirements established in the regulations and good practice guidelines on health, safety and occupational risks.

10.2 The University of Zaragoza will be responsible for keeping its staff, especially training staff, informed of health, safety and occupational hazards regulations.

10.3 The University of Zaragoza must ensure, especially, that all research involving potential risk or harmful material or that may cause damage to the environment complies with all legal requirements and other applicable guidelines, establishing protocols that ensure that this type of research is subject to appropriate review procedures in accordance with its policy on health, safety and occupational risks.

10.4 The research staff should pay special attention to complying with the protocols established by the University of Zaragoza for this type of research, facilitating its supervision by the management and the Occupational Risk Prevention Unit, complying with the result of such review and informing university officials of any incident that may pose a risk to personal health and the environment, as well as carry out the relevant containment and decontamination protocols to minimise the risk of exposure.

## **11. Industrial and intellectual property**

11.1 The University of Zaragoza and its research staff must ensure compliance with all the conditions relating to industrial and intellectual property established by the funding bodies. Particular attention should also be paid to compliance with the provisions relating to industrial and intellectual property contained in research contracts or agreements.

11.2 Although any results of research discovered or developed using public funds should be disseminated for the benefit of society in general, research staff should pay particular attention to not disclosing prematurely results that could be protected by industrial or intellectual property rights while minimising any delay in publication and dissemination pending the protection of property rights.

11.3 The research staff must address as soon as possible any question that may arise in relation to industrial and intellectual property, informing the Office of Transfer of Research Results (O.T.R.I.) of the University of Zaragoza so that they can exercise their rights and keep all members of the research team aware.

## **12. Supervision and audit**

12.1 The University of Zaragoza will be able to control and audit the research projects for which it is responsible, as well as any other that by agreement or any other way are developed in its premises to ensure that they are being carried out in accordance with the applicable legal and ethical requirements.

12.2 The University of Zaragoza must ensure that the staff responsible for carrying out these controls and audits have sufficient training, resources and support to fulfil that function.

12.3 The research staff shall cooperate both in the supervision and audit of their research projects by the relevant bodies and in the follow-up actions that they deem necessary. Likewise, it must inform the competent body of any shortcomings that they detect in this regard.

12.4 The University of Zaragoza and its research staff must ensure compliance with the economic terms and conditions applicable to any grant or contract related to research in accordance with the regulations and procedures established by the corresponding management units.

12.5 The University of Zaragoza will regulate the purchase or acquisition of materials, equipment or other resources for research and the hiring of personnel for the realisation of projects, all without prejudice to compliance with the legislation and regulations of higher rank that is applicable to it. Such regulation shall establish the ownership of the resources and the rights of the research staff who use them, as well as the procedures for the supervision and economic control of research projects.

12.6 The research staff must comply with the guidelines established by the University regarding the economic management of research projects, must facilitate their monitoring and economic supervision and communicate any doubt or irregularity of which they know to those responsible for university management as soon as they have knowledge of it.

### **13. Evaluation, peer review and advice**

13.1 The research staff of the University of Zaragoza should be aware that peer review is a fundamental part in the publication and dissemination of research results, as well as in the evaluation of personal applications for aid for the development of research and in the ethical review of research projects.

13.2 The research staff carrying out the peer review must do so with the highest standards of rigor and objectivity and must follow at all times the guidelines received from the entity for which they perform the function. The evaluation or review shall be rejected where the researcher does not consider himself sufficiently competent to carry out the evaluation or review.

13.3 It is the duty of the investigating staff to maintain confidentiality and not to retain or copy any material under review without the express written consent of the entity requesting the review. You must not use, or allow others to do so, the information under review without the express permission of the authors.

13.4 Research staff acting as reviewers shall declare any potential conflict of interest.

13.5 In the event that during a review a possible malpractice in the investigation under assessment is detected or suspected, the entity requesting the review shall be informed on a confidential basis.

13.6 The University of Zaragoza urges its research staff to participate in review work for meetings, journals and other publications, grant applications and ethical review of research proposals. Likewise, it recognises the obligation of those involved in the review to act exhaustively, objectively and confidentially, and undertakes not to pressure, directly or indirectly, reviewers to breach these obligations and to support them in the event that third parties try to do so.

13.7 Research staff may carry out advisory activities in respect of a subject in which they have a specific competence. The formulation of the advice should take into account the necessary recognition of the sources used and the most up-to-date information.

13.8 The acceptance of advice must be brought to the attention of the competent authorities of the University of Zaragoza that, if they consider it appropriate, they will proceed to regulate it by agreement or contract.

#### **14. Publication and authorship**

14.1 The research staff of the University of Zaragoza must accept their obligation to publish and disseminate, orally or in writing, the results of their research precisely and without manipulation that could lead to misleading conclusions, including those that are contrary to the hypotheses defended.

14.2 Research personnel shall not unreasonably delay the publication of research results obtained with public funding, unless the legal protection of those results so requires.

14.3 The sponsors and funders of research carried out at the University of Zaragoza must respect the duty of the research staff to publish the results of their research and not try to influence the presentation or interpretation of the results in an inappropriate manner. Any incident in this regard must be brought to the attention of university officials.

14.4 Research staff should be aware that it is unacceptable to submit research results for publication to more than one potential publisher at any given time or to publish them in more than one publication without indicating adequate recognition to previous publications.

14.5 Fragmented publication of parts of the same work shall be avoided, except for reasons of extension or at the request of the editors.

14.6 In the case of errors in the content of a publication, the authors must report them in publications of the same level, being necessary the retraction of the publication as a whole in case of serious errors.

14.7 The University of Zaragoza should provide training and support to facilitate research staff publication and dissemination of their research results with special emphasis on issues such as confidentiality, intellectual property issues, contractual or legal obligations, results with special interest for public health and topics of special interest to the media or the general public.

14.8 All decisions relating to publication and authorship shall be known to all potentially affected research staff and agreed jointly.

14.9 The authorship must be limited to those contributors and collaborators who have made a significant intellectual or practical contribution to the work, being unacceptable the consideration of author based on the hierarchical position or labor relationship. The research staff must be aware that any person listed as author must assume responsibility for the publication and be able to identify their contribution to the publication.

14.10 No person who meets the authorship criteria shall be excluded from the presentation of the results.

14.11 The order of the authors must be carried out according to the accepted guidelines in the discipline object of the work and must be known beforehand by all the authors. The order of signature should make it possible to distinguish and recognise the authors who have made the most important effort in the investigation and the person who directs or has the ultimate responsibility in the research protocol.

14.12 The research staff of the University of Zaragoza are obliged to include in their filiation the name of this institution. The foreign research staff will follow the regulations in force at the University of Zaragoza and the guidelines agreed with their entity of origin if this is the case.

14.13 The publication must recognise, unless expressly negative, the work of all contributors who do not meet the criteria of authorship in a thank you section. Likewise, all funders and sponsors of the research carried out must be clearly recognised, unless expressly negative, in the publication of the results of the research.

14.14 Research staff should include references to all previous work used in their research. In case of use of partial procedures or information, which by themselves have not been published, coming from persons outside the works in which they are handled, permission will be requested from their authors and will only be used once it is available making express mention of such situation in the publication to which, if applicable, it would give rise.

14.15 The research staff must comply with the regulations developed by the University of Zaragoza regarding the publication of the results of their research in open access repositories, as well as any other, related to this issue, to which the university has adhered or is applicable.

14.16 Research staff shall declare potential or actual conflicts of interest in relation to their research when making public the results of their research.

14.17 As a generator and transmitter of knowledge, research staff should contribute to the dissemination and communication to society of the results of their research in order to contribute to the cultural advancement of the general public and the dissemination of knowledge, and justify to society the resources dedicated to research.



## 15. Bad practice in research

15.1 The University of Zaragoza considers bad practice in research:

- a) The invention of results.
- b) The falsification of results.
- c) False declarations of data, interests or participation.
- d) Inadequate spending of R & D & I funds.
- e) False justifications for project/contract expenditure
- f) Plagiarism.
- g) Unjustified non-publication of results.
- h) Duplicate or unnecessarily fragmented publication.
- i) The deliberate omission of reference to other relevant works.
- j) The inclusion of honorary or unjustified references.
- k) The use of incorrect procedures that may result in excessive or unjustified risk or harm to humans, animals used in research or the environment.
- l) Improper use of inside or private information of individuals collected during the investigation.
- m) In general, any action contrary to the content of this Code of Good Practices in Research.

15.2 The University of Zaragoza must have a procedure to investigate complaints, both internal and external, of malpractice in the investigation, ensuring that the personnel responsible for the investigation have the necessary training, resources and support to fulfil their role.

15.3 The detection and elimination of malpractice in research should be part of the policy of the University of Zaragoza and its research staff collaborate with it in this purpose, denouncing any suspicion of malpractice before the competent body.